Draft 6-23-98

ART ISSUE PAPER ON ADDRESSING SUBSIDENCE IN THE DELTA

Statement of Issue

Some stakeholders and CALFED agencies are concerned that there is no integrated and comprehensive approach for addressing the subsidence of interior island areas. Other stakeholders, particularly Delta farmers and agricultural related business owners, as well as other CALFED agencies are concerned that an aggressive subsidence program in those areas would take significant areas of prime agricultural land out of production and in some cases is not warranted for subsidence control.

Background

The Levee Program currently assesses subsidence from a levee integrity standpoint. This results in a focus on areas immediately adjacent to exterior levees (within 2,000 feet). The ERP currently addresses subsidence where opportunities exist for habitat restoration.

The ERPP describes targets of up to 17,000 acres in the Delta to be restored as non-tidal fresh emergent wetland. This habitat is one of the most effective at arresting and potentially reversing subsidence. The largest acreage (approximately 10,000 acres) is targeted for the Central and West Delta Ecological Unit, a location that has experienced the greatest amount of subsidence since the early 1900s.

The Long-term Levee Protection Plan (LLPP) identified approximately 14,000 acres as high priority areas for subsidence control [defined as areas: 1) within 2,000 feet of levees, 2) annual subsidence > 1.5 inches per year, and 3) peat thickness > 10 feet]. Approximately 13,000 acres are in priority 2 areas that are classified like priority one but with peat depths $\leq$ 10 feet. The remaining two priorities total approximately 30,000 acres and are in the interior of the affected Delta islands.

There are four concerns related to an expanded subsidence program for interior island areas:

1) By not addressing subsidence in those areas, agriculture and the associated economic and environmental benefits of that agriculture cannot be sustained in the long term.

2) An expanded subsidence program will remove large areas of prime agricultural land from production. Farmers would have a decreased ability to control the use of their lands.

3) An expanded subsidence program may not be needed since the rate of subsidence is expected to slow as peat soils are depleted and more mineral soils exposed.

C-016489

4) It may not be economical to attempt a comprehensive subsidence effort in areas that have subsided to a great extent and have the potential to subside to the point that exterior levee integrity cannot be sustained.

Options for Resolving Issue

Three options are explored below:

Option 1:

Integrate the ERP and LLPP acreage targets at a programmatic level of detail, so that the areas that will be restored as non-tidal fresh emergent wetland serve, to the greatest extent possible, the dual role of providing subsidence control and habitat. It is expected that the subsidence and wildlife support functions provided by these wetlands will be compatable. Explain how areas will be targeted and prioritized for subsidence control in the interior island areas. For instance, areas that are expected to have much reduced subsidence rates within the next 20 years could be rated as having a low priority for subsidence control. Describe a program element that explicitly outlines how CALFED will work collaboratively with farmers to develop effective BMPs and farmland/wetland rotation strategies to accomplish the objectives of the program.

Option 2:

Target the approximately 30,000 acres identified in the LLPP as being areas of concern in the interior island areas for development and management as permanent non-tidal fresh emergent wetland.

Option 3:

Reject any integration or expansion of the subsidence control element to the interior island areas.

Action Item

Recommend Option 1 to CALFED Management Team and Policy Group. If accepted, the resolution would then be forwarded to the Strategic Plan Core Team for further development and integration into the Strategic Plan. The ERPP and the LLPP would be modified accordingly to ensure consistency. Develop a more refined description of this program component and estimate the acreage that could be affected by this approach. Work with agricultural stakeholders and resource agencies to a program element that explicitly outlines how CALFED will work collaboratively with farmers to develop effective BMPs and farmland/wetland rotation strategies that meet the program objectives, ensure the long term sustained agriculture, and minimize short term impacts to farms and farm related businesses.

C-016490